SouthWest Improvement Guidance

Chapter 7 Design Development Section 35 Project Review Process

7-35-1 Final Scope Certification Review

Updated December 21, 2021

Per DTSD's Planned Abandonment and Efficiencies Policy, formal in-person Final Scope Certification (30%) Review Meetings can be omitted when not considered necessary. The project delivery materials should still be sent out for review via email.

1.1 Originator

Project Development Section

1.2 Introduction

The primary purpose of the Final Scope Certification Review (formerly 30% review) is to confirm the scope, schedule, and budget for the project that was developed during the Project Definition Phase and to identify any concerns that need to be addressed prior to the start of the Project Delivery Phase. See <u>FDM 11-4-3</u> for further information on Final Scope Certification.

This section provides guidance on what items are required to be completed prior to holding the Final Scope Certification Review. The review should take place soon after the Scoping Phase 3 Meeting is held, and Final Scope Certification is signed. The plan development should be to the point where initial project impacts can be evaluated including environmental, real estate, utilities, and railroads.

It is a requirement on all improvement projects that project files be sent out for review. However, not all projects will require a formal Final Scope Certification Review face-to-face or virtual meeting. Projects that fit into one or more of these categories require a formal Final Scope Certification Review meeting to be held.

- Projects with utility conflicts.
- Projects requiring real estate to be acquired.
- Projects with environmental impacts.
- Projects requiring railroad coordination.

Final Scope Certification Review meetings can be held for other projects when the design team feels it would be beneficial.

An emphasis should be placed on reviewing the proposed pavement design shown in the plan typical sections during this review focusing on determining the most cost-effective treatment for the project, while still being constructably feasible. Coming to an agreement on the best pavement design alternative should help eliminate potential late design changes or the need for Cost Reduction Incentive (CRI) submitted by the contactor and provide a cost savings to the department.

Participation in these early reviews by Maintenance staff is required to confirm everything discussed during scoping has been incorporated into the plans. Attempts should be made to include region personnel with strong construction experience in the review as well.

1.3 Process

Prior to scheduling a Final Scope Certification Review meeting, the design team should refer to the <u>Design</u> <u>Quality Assurance (QA) Worksheet</u> for Final Scope Certification Plans to ensure that all needed concerns and possible issues have been reviewed and considered, that all needed data and information has been collected, and that all necessary participants in the design process have had an opportunity to provide input.

<u>FDM 3-1-10.5</u> contains a list of the deliverables expected to be completed prior to advancing the phase. Not all phase deliverables need to be included in the review process but should be available upon request. Deliverables that should be included in the review process and are required to be converted into reviewable files for comment (see <u>SWIG 7-35-15</u>) include:

- Draft preliminary plans including:
 - Title sheet with project limits and length
 - General notes page with utility contacts
 - Project overview (if applicable)
 - Typical sections existing & proposed, for mainline, ramps, side roads, trails, etc.
 - Base right-of-way plat or TPP (if applicable)
 - Plan and profile sheets including:
 - Base mapping

- Horizontal and vertical alignments
- Preliminary slope intercepts and existing right-of-way
- Existing bridges and box culverts with numbers labeled
- Proposed work indicated including proposed intersection improvements and structure locations
- Existing access points and access control
- Environmental/sensitive areas indicated
- Utility locations identified
- Cross sections (if applicable) with proposed reference line, existing right-of-way and utility locations identified
- *Preliminary construction estimate
- Signed Pavement Design Report
- Draft Environmental document with alternatives identified
- Draft Structure Survey Report (SSR) if applicable
- *Do not include in Bluebeam Session. Instead, provide access to those specific individuals that need to review estimate. Estimates should not be shared with external users.

The following items should be included as reference files for the project review and included as links in the email notification. It is not necessary to make reviewable files for these items:

- Minutes from Scoping Meeting
- Risk Register (should be developed during the Project Management Plan Phase and updated throughout the life of the project)
- Signed SMFA & SMMA

Prior to sending out the project review email notification as described in <u>SWIG 7-35-15</u>, the project manager/leader should update the project schedule in PMP including:

- Confirming that the project's PS&E date shown in the Control Schedule page is correct.
- Updating the value shown in the Detail Schedule for the "Percent Project Work Complete" if needed.
- Verifying that the PMP Phase is in sequence with the FIIPS Life Cycle (see FDM 3-1 Attachment 1.1)
- Updating the actual dates in the Detail Schedule for tasks that have been started or completed.

Reviewers are to use the <u>Final Scope Certification Project Review Checklist</u> to determine what items each reviewer is responsible for.

1.4 References

FDM 11-4-3 Final Scope Certification

Design Quality Assurance (QA) Worksheet

Final Scope Certification Project Review Checklist

Program Controls Design Engineer - Mike Rud, michael.rud@dot.wi.gov

Program Controls Design Engineer - John VonRuden, john.vonruden@dot.wi.gov

Barb Gassen, Mike Rud, & John VonRuden 1/13/2017
Author Date

7-35-5 Design Study Review

Updated June 16, 2020

Per DTSD's Planned Abandonment and Efficiencies Policy, formal in-person Design Study (60%) Review Meetings can be omitted when not considered necessary. The project delivery materials should still be sent out for review via email.

5.1 Originator

Project Development Section

5.2 Introduction

The primary purpose of the Design Study Review (formerly 60% review) is to finalize the Design Study Report (DSR) confirming the agreed upon scope is being implemented; along with refining the construction and non-let estimates, design delivery schedule, and design delivery budget. This review is contained within the Project Delivery Phase. See <u>FDM 3-1-15</u> for further information on the Project Delivery Phase and <u>FDM 11-4-10</u> for further information on the Design Study Report.

The Design Study Review meeting should be held after the environmental document is complete and prior to the

submittal of the DSR and plat for signatures.

This section provides guidance on the required design work to be completed prior to holding the Design Study Review meeting. All projects require a Design Study Review meeting.

5.3 Process

Prior to scheduling a Design Study Review meeting for a project, the design team will use the <u>Design Quality Assurance (QA) Worksheet</u> for Design Study Plans to ensure that all needed concerns and possible issues have been reviewed and considered, that all needed data and information has been collected, and that all necessary participants in the design process have had an opportunity to provide input.

<u>FDM 3-1-15.5</u> contains a list of the deliverables expected to be included and available for review. Please include the following deliverables in the review (see <u>SWIG 7-35-15</u> for further information on the ePlan Review Process).

- Preliminary Plan developed to the level which includes the items shown in <u>FDM 15-1 Attachment 4.1</u>. In addition, the following items should be included in the preliminary plan if applicable:
 - Preliminary Right of way plat or TPP
 - Preliminary structure plans
- *Updated construction estimate with all project bid items identified
- Draft DSR
- *Do not include in Bluebeam Session. Instead, provide access to those specific individuals that need to review estimate. Estimates should not be shared with external users.

The following items should be included as reference files for the project review and included as links in the email notification. It is not necessary to include these files in the review itself as these have been previously approved.

- Notes from the Final Scope Certification Review (including discussion on any action items that were generated during the review meeting)
- Signed environmental document and other pertinent environmental information such as the commitments
- Updated SMFA & SMMA if applicable
- Risk Register (should be developed during the Project Management Plan Phase and updated throughout the life of the project)

Prior to sending out the project review email notification as described in <u>SWIG 7-35-15</u>, the project manager/leader should update the project schedule in PMP including:

- Confirming that the project's PS&E date shown in the Summary Schedule page is correct.
- Update the value shown in the Base Schedule for the "Percent Project Work Complete" if needed.
- Verify that the PMP Phase is in sequence with the FIIPS Life Cycle (see FDM 3-1 Attachment 1.1)
- Update the actual dates in the Base Schedule for tasks that have been started or completed.

Reviewers are to use the <u>Design Study Project Review Checklist</u> to determine what items each section is responsible for.

If certain aspects of the plan, that do not affect slope intercepts and right of way needs, are not developed enough to be included in the Design Study Review, design teams should add an additional review between the Design Study Review and the Pre-PS&E Review. Adding this additional review ensures that the Pre-PS&E review isn't the first time these items are being reviewed within the region so that, if changes are needed, time is available to do that work. Items that may require this intermediate review include, but are not limited to:

- construction staging plans
- permanent signing plans (if Type 1 signs are included)
- lighting plans
- traffic signal plans
- detour plans
- erosion control plans

Since the 1078's should not be sent out to the utility companies with facilities on the project prior to the implementation of these items into the plans, every effort should be made to get these items into the Design Study Review. However, if the plan is developed enough to advance into final design after the completion of the Design Study Review and waiting for these items to be fully developed would only delay the project schedule, then the design team should proceed with the Design Study Review.

The review guidance outlined in <u>SWIG 7-35-15</u> should be followed for creating this intermediate review. This review should happen, and the comments from the review should be included, prior to sending out the 1078's.

5.4 References

FDM 3-1-15 Project Delivery Phase

FDM 11-4-10 Design Study Report

FDM 15-1 Attachment 4.1 Preliminary Plan Worksheet

Design Quality Assurance (QA) Worksheet

Design Study Project Review Checklist

Program Controls Design Engineer - Mike Rud, michael.rud@dot.wi.gov

Program Controls Design Engineer - John VonRuden, john.vonruden@dot.wi.gov

Barb Gassen, Mike Rud, & John VonRuden

1/13/2017

Author

Date

7-35-10 Pre-PS&E Review

Updated September 30, 2021

10.1 Originator

Project Development Section

10.2 Introduction

The primary purpose of the Pre-PS&E Review is to ensure all PS&E submittal files are complete and confirm that there will be no problems at PS&E that would prevent the plan or PS&E documents from being successfully LET at the proposed scheduled letting. This review is contained within the Project Delivery Phase. See <u>FDM 3-1-15</u> for further information on the Project Delivery Phase and <u>FDM Chapter 19</u> for further information on the PS&E.

This section provides guidance on the required design work to be completed prior to holding the Pre-PS&E Review meeting. The Pre-PS&E review meeting shall be held a minimum of **two months** prior to the PS&E submittal date. The Pre-PS&E review is required for all projects.

10.3 Process

Prior to scheduling a Pre-PS&E review meeting for a project, the design team will use the <u>Design Quality</u>
<u>Assurance (QA) Worksheet</u> for Pre-PS&E plans to ensure that all needed concerns and possible issues have been reviewed and considered, that all needed data and information has been collected, and that all necessary participants in the design process have had an opportunity to provide input.

The following items are expected to be included and available for review:

- Completed plan
- Special Provisions
- Plan Letter
- Contract Time for Completion (Timechart)
- *AASHTOWare Estimate
- *Estimate Documentation
- Standard Detail Drawing (SDD) List
- Environmental Commitments
- Utilities Status Report (USR)
- Certificate of Right of Way
- Certification of Railroad Coordinator with Highway Construction
- Notes to Construction

*Do not include in Bluebeam Session. Instead, provide access to those specific individuals that need to review estimate. Estimates should not be shared with external users.

The items listed above are what is required for the region review. There are additional items that need to be included in the PS&E Submittal. Refer to <u>FDM 19-10-10</u> for the complete list.

The following items should be included as reference files for the project review and included as links in the email notification.

- Notes from the Design Study Review (including discussion on any action items that were generated during the review meeting)
- Finalized Risk Register

Prior to sending out the project review email notification as described in <u>SWIG 7-35-15</u>, the project manager/leader should update the project schedule in PMP including:

- Confirming that the project's PS&E date shown in the Summary Schedule page is correct.
- Update the value shown in the Base Schedule for the "Percent Project Work Complete" if needed.
- Verify that the PMP Phase is in sequence with the FIIPs Life Cycle (see FDM 3-1 Attachment 1.1)
- Update the actual dates in the Base Schedule for tasks that have been started or completed.

Reviewers are to use the <u>Pre-PS&E Project Review Checklist</u> to determine what items each reviewer is responsible for.

10.4 References

FDM 3-1-15 Project Delivery Phase

FDM Chapter 19 Plans, Specifications and Estimates

FDM 19-10-10 Required Exhibits

Design Quality Assurance (QA) Worksheet

Pre-PS&E Project Review Checklist

Program Controls Design Engineer - Mike Rud, michael.rud@dot.wi.gov

Program Controls Design Engineer - John VonRuden, john.vonruden@dot.wi.gov

Barb Gassen, Mike Rud, & John VonRuden
Author

1/13/2017

Date

7-35-15 ePlan Review Process

Updated April 5, 2021

15.1 Originator

Project Development Section

15.2 Introduction

The ePlan Review Process was developed to allow multiple reviewers the ability to access and add comments to the review files simultaneously. The files are included in a Bluebeam Studio Review Session that is created by the PDS Design Team. The review session is sent out to the regional reviewers through Microsoft Outlook.

If an external user such as a consultant or municipality does not have Bluebeam access, they can download a free trial version at the following location: <u>Bluebeam Trial Version</u>

15.3 Process

When all sections on the <u>Design Quality Assurance (QA) Worksheet</u> have been addressed to the degree possible, the project manager/leader will convert all desired review files to PDF's and use the process outlined in the <u>SW Region Guidance for Creating ePlan Review Workflow</u> instructions to create the review session that can be used for online collaboration. The Design Team will then send an Outlook meeting invitation setting up the review meeting date, location, any necessary equipment, listing the conference call line (if needed), and outlining review deadlines a **minimum of two weeks** prior to the meeting. The project manager/leader will place review documents in the project folder and will allow two weeks for review and comments. Consultants will forward all review documents to the project manager for placement in the review folder.

Prior to selecting the meeting date and time, the Design Team should view the Outlook calendar titled "DOT CAL DTSD SW REGION MEETINGS" to see what other plan review or pre-construction meetings are scheduled as to not conflict.

The reviewers of the project files will follow the <u>SW Region ePlan Review Instructions</u> when reviewing the project files. The reviewers should also use the <u>Final Scope Certification Project Review Checklist</u>, <u>Design Study Project Review Checklist</u>, or <u>Pre-PS&E Project Review Checklist</u>, depending on which review it is, to determine what items each section is responsible for.

The project manager/leader should complete the meeting agenda listed below for the review phase the project is at and hand out the agenda to the participants of the meeting to follow during the meeting. At the beginning of each review meeting, the project manager/project engineer should pass around the Review Meeting Sign-In Sheet for all in attendance to sign. After the meeting, the sign in sheet should be scanned and placed in the project files.

Once the review meeting has taken place, the Design Team will compile and respond to the comments using the instructions outlined in Phase 4 of the SW Region Guidance for Creating ePlan Review Workflow. A

reminder that once all the comments have been addressed, an email should be sent back to the reviewers within two weeks of when the meeting was held letting them know if their comments were incorporated or not, and if not, why.

15.4 References

Bluebeam Trial Version

SW Region Guidance for Creating ePlan Review Workflow

SW Region ePlan Review Instructions

Final Scope Certification Project Review Checklist

Design Study Project Review Checklist

Pre-PS&E Project Review Checklist

Final Scope Certification Review Meeting Agenda

Design Study Review Meeting Agenda

Pre-PS&E Review Meeting Agenda

Review Meeting Sign-In Sheet

Program Controls Design Engineer - Mike Rud, michael.rud@dot.wi.gov

Mike Rud 1/13/2017

Author Date